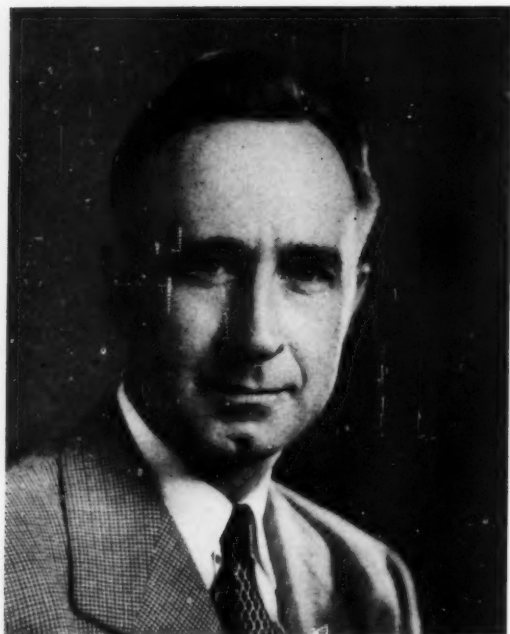


# LAW *AND* ORDER





Vernon W. Thomson

## Guest Editorial

It is a pleasure to welcome "Law and Order" to the field of publications disseminating information in aid of law enforcement officers.

Those who have been intimately associated with law enforcement at the trial and appellate levels have a deep appreciation of the role of the police officer in the maintenance of public order and the apprehension and conviction of criminals.

The alert, trained and courteous peace officer inspires the respect of the community. By his working knowledge of the law and of the scientific aid which the laboratory can give him, he is able to produce results which pay off in the courtroom.

The untrained officer, on the other hand, can commit errors upon which his case will founder beyond salvage by even the ablest prosecuting attorney. He may destroy more evidence than he preserves. He may fail properly to preserve and identify evidence so that it can be admitted in court, or may obtain it by an unconstitutional search and seizure so that it can never be used. By an unguarded word, later construed as a threat or a promise, or by too lengthy questioning, he may cause a truthful confession to be ruled out of evidence and a criminal freed.

So efficient and effective law enforcement, with all that it means to society, depends upon the men on the police and sheriff's forces. A professional magazine devoted to discussion of their common problems and current developments in police science can serve them well.

*Vernon W. Thomson*  
Attorney General of Wisconsin

# LAW AND ORDER

AN INDEPENDENT, PROFESSIONAL MAGAZINE  
FOR ALL CONCERNED WITH THE BUSINESS OF LAW ENFORCEMENT

WILLIAM C. COPP  
*Publisher*

LEE E. LAWDER  
*Editor*

LILLIAN PETRANEK  
*Treasurer*

FRANK G. MACALOON  
*Circulation Mgr.*

## ADVERTISING REPRESENTATIVES

DAYTON M. JONES  
HERBERT A. WHITE  
303 West 42nd St.  
New York 36, N. Y.

SCOTT KINGWILL  
35 East Wacker Dr.,  
Chicago 1, Ill.

DUNCAN A. SCOTT  
Mills Bldg.  
San Francisco, Cal.  
2978 Wilshire Blvd.  
Los Angeles 5, Cal.

Vol. 1

FEBRUARY 1953

No. 2

## Contents

	PAGE
COVER PHOTO BY WORLD-WIDE PHOTOS	
GUEST EDITORIAL .....	2
<i>Vernon W. Thomson, Attorney General of Wisconsin</i>	
TEAR GAS—HARMLESS WEAPON OF OFFENSE .....	4
CHIEFLY CHATTER .....	6
<i>James B. Ray, Chief of Police, Aberdeen, Md.</i>	
CRIME DOES NOT PAY? .....	6
QUESTIONS FOR YOU TO ANSWER .....	6
"WE NEED A DOCTOR" .....	7
STATISTICS HAVE VALUE .....	7
SPARTA'S JUNIOR POLICE PATROL .....	8
<i>Eugene W. Heugel, Chief of Police, Sparta, Mich.</i>	
NOTES ON FINGER PRINTING .....	10
RESUSCITATION—BY ARTIFICIAL RESPIRATION .....	12
NEW PRODUCTS AND METHODS .....	13
<i>Edited by Frank G. MacAloon</i>	
LETTERS .....	14
BOOK REVIEW .....	14
<i>by David O. Moreton</i>	
FROM THE EDITOR — RANDOM SHOTS .....	15
OUR ADVERTISING POLICY .....	16

Issued monthly by LAW AND ORDER Magazine, 303 West 42nd St., New York 36, N. Y. Subscription Price for the United States and Canada \$2.00 Single Copy 25c

COPYRIGHT 1953, BY WILLIAM C. COPP

# Tear Gas

## *Harmless Weapon of Offense*

. . . Staff Written



ACME PHOTO

Protective armor is used as a shield against stones thrown by agitators.

There are several thousands of law enforcement officers in the United States but only a very small percentage of them have ever had the occasion to utilize the tear gas which is part of their standard equipment. The equipment can be found in towns that have no industrial areas, where the possibilities of strikes and riots are very remote. But—no one can tell when the small, two man police department will receive a call from some frantic citizen reporting a berserk person

Police prepare to enter a house where an armed killer is barricaded.

ACME PHOTO



who has barricaded himself in a room—with an arsenal as his companion. Perhaps it will be discovered that gangsters have selected the little town as a “perfect hideout” and are armed, ready for battle.

The Tear Gas gun or grenade has been rightly called the “defensive life saving weapon.” It certainly has saved the lives of many policemen by rendering harmless the “opposition.”

In 1923 a chemist by the name of John Young first produced the chemical combination called “tear gas.” His discovery did not gain immediate acceptance but it was constantly improved up to the product that we know today.

Why is tear gas such an effective weapon? Tear Gas is designed to affect the lachrymals—those glands that produce tears. It induces discomfort to the sight and smell organs causing the victim to close his eyes and seek fresh air.

To be academic for a moment, there are a few elementary facts about gas to review which will assist us in understanding its nature. A gas completely fills any container in which it is placed. It is made of molecules that are very active and are moving constantly. According to the *kinetic molecular theory*, the molecules are in constant motion with speeds ranging from 500 ft. to 1 mile per second. We can recognize the great activity of gas molecules from our own experiences. We know a strong odor will fill a room immediately no matter how large or small the room may be. The odor is due to the gas molecules in the air.

Tear Gas is a non-toxic gas. It is an offensive weapon that does not injure a person but renders him helpless.

Like all scientific methods of combating crime, improvements have been made on the construction and contents of the gas weapon. Not too long ago when officers threw a grenade into a disorderly group of rioters, one could pick it up and throw it back with a “Here, cop, have some of your own medicine.” With the new weapons this is not possible. This new design allows the gas to escape (to be discharged) through many holes in the side of the chamber. Should someone be foolish enough to try to return it, his hands would be burned. In a recent strike a grenade was thrown by the police and one striker yelled to his friend to pick it up and throw it back. The man did pick it up to throw but it wouldn't leave his hand. He was taken to the hospital with a pair of third degree burned hands.

In every situation where mob rule and chaos is likely

**Law and Order**

to burst forth, the appearance of the law enforcement officer on the scene has a leveling influence. The officers are men with authority BUT to support that authority it is necessary to have weapons to assist them in preserving law and order. A Tear Gas kit is standard equipment for almost every police department. Most patrol cars carry it along with them.

This gas comes in many different containers, aluminum or brass cartridges, grenades, nightsticks, shells and candle. It can be manufactured so the gas forms a visible cloud or it can be made the colorless type. The officer must be acquainted with his equipment to use the right weapon for the right purpose. It is a case of not sending a boy on a man's errand.

Two of the most common causes that require the use of Tear Gas is to control disorderly groups and to dislodge barricaded persons.

Instructions on the operation of the particular type of container to be used—will be carefully printed on the package. An officer should familiarize himself with how to handle the equipment as soon as it is received as it will not be useful if in the middle of an emergency he has to stop and read directions . . . (That's not as silly as it sounds) The number one instruction for the use of Tear Gas is to exercise good common sense.

It is most important that the wind is blowing in the right direction. Select the proper grenade to produce a heavy concentration. Be careful not to throw it directly into a group. Always consider an exit for the crowd before you throw. The object is to disperse the crowd without injury to anyone. Make every effort to avoid hand to hand contacts with individuals unless that is necessary to apprehend the ring leaders.

Gas masks should be employed by officers as protection against change of wind currents and the possible necessity of entering the gassed area to arrest an individual should the occasion warrant it.

The handling of an armed, barricaded person requires the same common sense. In this case however, the wind is not an important element. The use of the 1½" caliber gas gun and accurate flight projectiles is the general practice. The gun is equipped with adjustable sights for ranges of 50, 75, 100 yards. In the case of the house with many rooms where the person can change his location, it is best if two guns can be brought into action. One is used on the front of the house and the other in the rear.

Most important is a systematic routine. First gas the rear of the house—as a matter of fact all locations where the barricaded person is NOT, and save until last the actual room where he is "holed up."

Don't hurry. Do your work from a covered position if possible. Be patient.

As previously stated, departments have been equipped with chemical munitions for years and have never used them. One chief reported that he had been with the department for 43 years (in an industrial section, too) and never had the occasion to handle it. He has the full

## WEAPONS!

*A vital part of police work must necessarily be the means of enforcing law. Weapons will be carefully studied by a series of articles in LAW AND ORDER as a part of its information service to readers. This article is the first of the series and others will follow as useful information can be organized.*

**EDITOR.**

equipment—"just in case." Some Police Departments, however, are not prepared for an emergency. Baily Barker of Federal Laboratories has a favorite sales story which has a good point. He says "No one says to himself I might be sick next week so I will buy some quinine (or any other medicine) today. People wait until they need it and then buy it. Unfortunately there are some enforcement officers who follow this line of reasoning and find someday they are caught short in an emergency."

The active life of a shell or grenade is about two years although recently a station had some that were six or seven years old and thinking they were "dead" released one. It was very much "alive" much to the consternation and embarrassment of those concerned. It is said that the "memory" of this event lingered in the room for months. The "reminder" seemed to penetrate books and furniture—almost everything was reluctant to part with the odor.

Both the Federal Laboratories of Pittsburgh and the Lake Erie Chemical Co. of Cleveland, makers of Tear Gas have in their files countless letters of testimonies to the fact that many lives have been saved through its use. The companies' chemists are constantly working to increase the efficiency of this "harmless weapon of offense."

**Handkerchiefs are not gas masks. Tear Gas disperses a disorderly group of strikers.**  
WORLD-WIDE





James B. Ray, Chief of Police  
Aberdeen, Md.

## Chiefly Chatter

**JAMES B. RAY, Chief of Police  
Aberdeen, Md.**

There are many towns in these United States that were once looked upon as quiet, little, rural towns. Defense work and war industries have mushroomed many of these places into cities of importance. Such a town as this, is Aberdeen, Md.

In June of 1920 the population was only 1500. Times have changed and today there are 20,000 people living in the town. The increase is attributed to the Proving Grounds. The Aberdeen Proving Grounds provides employment for the majority of citizens.

The police force of Aberdeen consists of 5 men. The Chief is James B. Ray, better known to all as Ben Ray. He has been a policeman for 36 years and has been at Aberdeen since 1919. His career as a law enforcement officer started in Havre de Grace (Md.) where as an ambitious young man he was an "extra" on the police force. Chief Ray is native to these parts. Since his opportunity to take the examination for policeman in Aberdeen came he started his career. Ben Ray was a well known athlete in his younger days. He was a catcher in the Susquehanna League and loves to tell about the wild pitches he used to catch. The fingers of his right hand have been broken several times and a glance at his hand will verify his tales of catching.

- 1: How is it possible for an officer to lose his case in court even if he has evidence to substantiate it? Answer is on Page 2.
- 2: What are the lachrymals? Explain the kinetic molecular theory and what relationship it has to the spreading of gas. Answer on Page 4.
- 3: What Junior Police Patrol received

a commendation from the Attorney General's office on their work in apprehending a criminal? Answer on Page 9.

- 4: Who was Dr. Marshall Hall? Who was Sir E. Sharpley Schaefer and what did these two men accomplish? Explain the difference between the old method and new in

artificial respiration. Answer on Page 12.

- 5: What percentage of people fingerprinted this year will be second or more offenders? Who may be fingerprinted? Answer on Page 10.
- 6: What is the quickest way to get a doctor when needed? Answer on Page 7.

Now it is a different kind of catching that he is doing. The major police problem of Aberdeen is the traffic. Situated on Route 40, it is the most important town between Wilmington and Baltimore. At quitting time at the Proving Grounds when civilians, officers and enlisted men go to their homes it is estimated that 20,000 cars pass the main intersection within 45 minutes.

Although Chief Ray's department is understaffed, the co-operation with the military police at the Proving Grounds is worthy of mention. If additional man power is needed for a special occasion the chief need only to reach for the telephone and in a short time all the assistance he needs is at hand.

When asked if the proximity to a large military operation brought any problems of crime or disorder to his town, he replied that there is seldom any trouble from that source, at any time.

Chief Ray is a typical example of the many men who work for the "love" of the job of law and order.

## Crime Does Not Pay?

There has been a much publicized slogan that "Crime Does Not Pay". There must be times when a poor man pauses and wonders as he looks at the rich racketeer or gambler . . . Is the statement true?

According to the new World Almanac, one larceny is committed every 26 seconds. The amount of money and property that was reported stolen last year in the first six months was \$150,136,172.00. Keep in mind the fact that this report reflects only 376 cities in the United States. Automobiles account for the largest number of thefts, amounting to \$90,000,000 or 60% of the total reported. The loot from the average robbery was \$194 whereas the average burglary came to \$139. The auto thefts averaged out at \$965. It is interesting to note that New England's robbery rate was the lowest in the country. The highest in the nation was the Pacific Coast.

As long as we are looking over this report let us add that over 1,000,000 major crimes have been committed during the first half of 1952. This was reported by J. Edgar Hoover, Director of the Federal Bureau of Investigation.

An auto theft was committed every 23 3/4 minutes. Of the auto theft arrests 19,742 were men and 480 were women.

The total number of people arrested for robbery, larceny, auto theft etc. was 169,870. This was the part of the group that found that crime did NOT pay.

## **"WE NEED**

**A**

## **DOCTOR"**

It is true that police work is 98% routine. Part of that routine is an organized method of giving descriptions of people, cars and other lost or wanted property. These routines have been established and become habit so that the work is orderly and uniformed. One of the first things a company clerk in the army learns is "There are three ways of doing things. The wrong way, the right way and the army way." A new man questions the efficiency of doing a certain routine but soon learns when he is familiar with the entire picture there is good reason for every operation.

A routine is necessary in getting a doctor to the scene of an accident.

## **Statistics Have Value**

There is only one sure way to keep a check on progress and that is by having a set of comparative statistics. Whether it be a police department or a business man owning a little corner store, both must keep records for their own benefit.

At the end of a year the businessman looks at his books to see if his year has been worth while. From his records he can see what merchandise sold best and perhaps by having a new piece of equipment might still be able to do a better job.

The police department also makes a report at the end of the year to the city fathers. With the report generally comes a recommendation as to how greater efficiency in police work can be accomplished. It might be evident that the addition of new equipment might improve operations.

One of the most uninteresting parts of police work is the paper work. Yet, the matter of records is by far the most important phase. It is by keeping a record of the number of accidents at a certain corner that a traffic hazard is determined and analyzed.

Not everyone who keeps statistical records is required to interpret them. Safety engineers will look at records—see the number of accidents—then determine the cause. From the causes come the recommendations. Perhaps a traffic light on the corner will not be the solution to the accident problem. Perhaps a one way street or a no turn street will be the answer. However nothing can be accomplished without first having the record of past performances. Police records are the way to progress.



**The Physician's Exchange is the answer to  
"What doctor is available"**

In most towns and cities there are telephone answering services called the Physician's Exchange. Close cooperation between the police and the exchange is helpful to both parties. In case of an emergency where the services of a doctor is needed, the first step is to call your town physician if the city has appointed one. If he is not available, don't waste time by calling others as you may have the same results. Call the Exchange at once. It's a good thing to remember that these people are paid by the doctors and usually are aware of every doctor's whereabouts at any hour of the day or night.

Doctors have a system of having one of their colleagues "cover" for them. For instance, usually it is very difficult to get a physician on a week end or Sunday because so many "go away." Usually one man is appointed to "cover" for the doctors. The Exchange knows all these facts and will save you time and effort.

When calling, the first statement to make is—"This is so- and- so of the so-and-so Police Department. This will immediately alert the operator of the importance of your call. Follow by short pertinent information such as: "We need a doctor at once at such and such address, a man cut his finger on his wood saw and is bleeding badly. What doctor is available?"

This will get results. There are times when no doctor is on the spot and available. The Exchange will advise you of this fact and suggest that you take the man in the squad car to the nearest hospital. They appreciate that a squad car is not a public taxi but in an emergency will make the suggestion.

You will find the Exchange is most co-operative with the police department. They are anxious to be of assistance because of the many times they have had to call on the radio patrol car to get an important message to a doctor calling at a home that has no telephone.

A life often depends upon the element of time. Don't waste time trying to locate a doctor. The Physician's Exchange will do it for you.

## Sparta's Junior Police Patrol

In August of 1951, I had two juveniles in my office who had been in trouble. During the course of our conversation, I noticed they were extremely interested in police work. After talking to them awhile the idea of a Junior Police Patrol struck me. I asked the boys what they thought of the idea and their eyes gleamed with the thought of it. At this time I didn't quite know what I was going to teach them, but I knew there was a good program in the making. I discussed my ideas with our Village President H. J. Kurtz and other members of the council. They immediately backed my program by allowing me an appropriation of \$100.00. I then gave the matter more thought and came up with my idea of a regular training program.

The program consists of 10 weeks training of 1 hour every week. These youngsters were taught finger printing, proper way to report fires and accidents, the reporting of a traffic violator by make of car, color, year, license number, place of violation and time violation happened. My original purpose for this was to train their minds to make proper reports should anything happen. However, when the violation reports started coming in, I saw that it was doing more than just that for them. It was giving them an active part in the community. It made them feel that they were now an important part of their community. It also gave me an idea where the most traffic violations were being committed and we took steps to correct them. They were also taught safety with guns, pedestrian safety, bicycle safety, operation of the two way radio system from the cruiser, a trip to Grand Rapids Police Department to see how a large department operates. There they saw the Grand Rapids radio room where our cruiser transmissions were received. They were also taught the essentials of First Aid; artificial respiration, tourniquet, pressure points to control bleeding and bandages. We

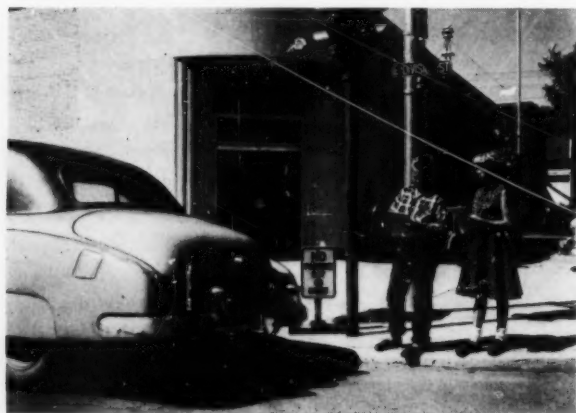
By Eugene W. Heugel, Chief of Police  
Sparta, Michigan

ended our training program with a picnic. This entire program is supervised by the police department.

We announced the start of the program for a junior patrol in the local newspaper and the response was tremendous. Originally the patrol was intended for boys only. However there were so many requests from the girls that it was necessary to start a class for them. The population of Sparta is 2317. To date we have had 110 kids in the patrol. Requests are pouring in for another class so we are going to start another one very soon. The original patrol is now in its second year of operation. During the summer months when there was no school, we still kept them busy with reporting violators, ball games, picnic and swimming. This has kept their interest high and kept them in touch with the police department.

The citizens have taken to this program with as much enthusiasm as the youngsters. The kids take home what they have been taught so actually we are teaching the parents along with the kids. No one has resented yet being turned in by a Junior Patrol member. We merely make a record of the report and if we ever have occasion to stop the violator again, pedestrian or vehicle, we relate their violation turned in by the Junior Patrol to them. However we soon will start sending letters to violators advising them of their violation turned in by the Junior Police.

We had one amusing instance. A 10 year old girl came into our office with the report of a car speeding 40 miles an hour in a 30 mile zone. I immediately explained to the girl that even we—as officers—couldn't determine the exact speed unless we clocked them. I asked her what made her so sure the car was going 40 miles per



Member of the Junior Patrol checking traffic violations



Members are taught how to write reports and how to use the radio communications

hour. She said "I know it was, because it was my daddy and I was in the car with him."

Last fall a man stopped at the local High School looking for a high school girl. He told some of the kids on the playground that he was a U. S. Treasury man and had to see this girl. Some of the members of the Patrol didn't trust the man and took down his description, that of his car and license number. They didn't have a pencil or paper so three kids got together on the license plate. The first remembered the first two numbers—the second the next two and the third the last two. They contacted me at once and told me of their findings. I got the registration of the vehicle and checked with the Treasury Department to see if such an individual worked for them. When I found he didn't I contacted the F.B.I. who apprehended the man by 6 P.M. The Patrol was given a citation for their work from the U. S. Attorney at Grand Rapids.

In two years we have had only one juvenile delinquent and that case we have turned over to the authorities. We have had a few others who have been in minor troubles but we have been very fortunate in straightening them out without court action. The Junior Patrol definitely helps our delinquency problem. With 110 kids mingling around the town it is pretty difficult for a kid to do something without one of the members hearing about it. Whenever they do hear something, believe me, they make a bee line for the police station to report their findings. We have not had to find a stolen or misplaced bicycle, tricycle or wagon since we have had the Patrol. If anything is reported missing, we give the information to the Patrol who immediately sets out to find it. Also, they turn in everything they find—footballs, billfolds, cigarette lights etc.

I don't know of any other patrols like ours in the country. Ours operates like a regular police department. Upon completion of their 10 week training we give them a little parliamentary training by letting them nominate and elect their own officers. None of them had ever done this before and it was great stuff. The Patrol is broken down into three groups. Boys ranging from 6 to 9 and 10 to 16 and girls are in one group.



Upon the completion of a ten week course in finger-printing, traffic violations and report writing the member receives an award certificate.

We have one inspector in charge of all 3 groups. Each group has its own captain and two lieutenants. They are broken down into four squads with a sergeant in charge assisted by a corporal. After a time they will have their own chief who naturally will work under my supervision. They receive promotions upon the merit of their work. For the last two years the Police Department has not received a call on vandalism on Halloween.

After completion of their training they each receive a diploma signed by the Mayor and myself. In better than a year this program has not cost us over \$150.00 including the badges, diplomas and picnics. This figures out just about one dollar a year per member.

I would like to see many communities, large or small, start a program of this nature. I know it would cut down their Juvenile Delinquency problem. You can't realize how much satisfaction you get out of these kids for the little time you spend with them. I walk down the street and instead of them hiding from a policeman they come running over to be with a "Hi Gene." They are not afraid of a cop. They realize he is their friend.

(Continued on Page 14)



The youngest member of the Junior Patrol receives his Certificate of Award from Chief Heugel.



A watermelon party for all Junior Patrol Members is the "social" part of the program.



The fingerprint files of the Federal Bureau of Investigation has over 126,000,000

A. P. PHOTO

### ... Staff Written

There are many ways of assuming the identity of an individual. His signature may be forged so well it can baffle experts. With the help of surgery and make-up the appearance of one person, even to the mannerisms and voice, may be similiar to that of another. Records can produce cases where men spent many years in jail because a witness honestly thought he was identifying the right man. The only sure method of identification is that of fingerprinting.

One officer put it very neatly when he said "The Good Lord made one provision in the interest of law and order. It is one of the remarkable miracles of nature that of all the millions of people who inhabit this earth, no two have the same fingerprints." It is often stated

### The first operation in the scientific method of identification

WORLD-WIDE PHOTO



## Notes on Finger Printing

that in the world every man has someone who could be called his twin. That may be so, but the fingertips are different.

Fingerprinting has been used as identification long before it came into use as a means of criminal apprehension. Ancient monarchs used their thumb print as the official seal of the kingdom. In the early nineteenth century, Sir William Herschel and Sir R. Henry used the fingerprints as signatures for receipts of monies and on binding contracts.

The basic theory of finger printing is that the skin of the body is everywhere marked by creases and tiny ridges. A scientific study of the skin over many decades has established that although the general features, size, weight, bone structure and coloring of the body change with growth and years, the papillary ridges on the finger tips, palms and soles of the feet retain the pattern a child is born with, as long as the skin itself lasts. While hard callouses and sometimes skin diseases may partly dim these patterns, they return to the original pattern when the disease is cured, or a callous softens. There is no permanent way that a person can change these identifying patterns.

The finger tip patterns always resolve themselves to a center, called the "core" or "inner terminus" and an "outer terminus" identified by a pattern characteristic called the "delta" which is suggested by river deltas. During the 1800s German, French and British scientists developed a science of cataloging these finger print patterns so that the print of a human finger could be filed away, and relocated more accurately, and about as fast as an individual name can be found. But, the difference from identifying by name is that two or more people can have exactly the same name, but no two persons have ever been found with identically the same finger prints, so complex and varied are the patterns.

It wasn't too many years ago when the thought of fingerprinting was generally synonymous with the law and criminal. Possibly this may be attributed to the publicity given it by the movies and books. As a matter of fact, writers did such a good job educating the criminal that only the very newest amateur will leave his prints on a job nowadays. In spite of this, each year many thousands of new prints are added to the Federal Bureau of Investigation's file.

This file is in the nature of a clearing house of identification. At the present time there are more than 124,000,000 sets of prints in Washington. When J. Edgar Hoover was appointed to head the F. B. I. in 1924, one of the first steps for centralization was to bring the fingerprint file from Fort Leavenworth. To this collection was added the files of the International Association of Chiefs of Police. This gave a nucleus of about 310,000 sets. With the co-operation of every law enforcement agency in the country, the files have increased until their present day size.

The FBI uses the system evolved by Sir Edward Richard Henry. This system is explained in his book "Classification and Uses of Finger Prints." The book is most important to students. Five editions were printed between 1900 and 1922; about 32,000 copies now are in use throughout the world. James Henry Holt published a book in 1941 "Finger Prints Simplified" which is a further amplification to the Henry system. 70 other nations co-operate with the FBI on the exchange of data, making it possible to trace a criminal by finger prints throughout the world. Only the French retain a different system. The FBI have been able to locate prints by a single print, although really fast identification and location depends on the print of all ten fingers.

Statistics show us that of the 423,214 fingerprint cards received by the F. F. I. in the first half of last year, 60.6% were at least second offenders. That means 39.4% had their prints go on record for the first time.

The question often arises as to just who can be fingerprinted. Must it be a felony charge? Is it misdemeanors? How about people held as suspects?

Most states leave it to the good judgement of the local agency as to whom they want to fingerprint. In the State of Pennsylvania complete coverage is given by law which states that ANYONE charged with a crime is subjected to fingerprinting. Technically, one could be fingerprinted for overtime parking. A crime is defined as "any infraction of law or ordinance". This practice would certainly be impractical, expensive and require additional man-power. Of course those reasons are just minor when it comes to the consideration that the popularity of the law officer would hit rock bottom.

There is no doubt about the fact that through such a procedure a great number of missing persons would turn up, and those who had no desire to meet up with the law would have to be extra careful. Even now there is a movement afoot to make it essential that every one applying for an auto license be fingerprinted. This suggestion was intensified after the capture of Willie (The Actor) Sutton. He had a license under an assumed name and a case such as his would not have been possible. Such an ordinance would also be a precaution and check against persons whose licenses have been revoked. It would prevent them from obtaining another one.

The American public as a whole tends to object to fingerprinting, just as they are antagonistic toward regimentation of any sort. This feeling is not as strong today as it was twenty years ago. For purposes of security the public has been educated by the defense and industrial plants to the necessity of fingerprinting and other means of identification. This has become a recognized procedure. As a result people are divorcing the idea that fingerprinting is only done to criminals and are now looking upon it as purely a means of identification.

Most hospitals now use the imprint of a new born baby's foot to insure proper identification. In many

sections of the country civil defense workers have had the children fingerprinted in case of a national disaster.

Probably everyone is familiar with how a finger print is taken, simply by inking it lightly and taking an impression, or rolled prints, or both, on good white paper. The ridges of course, take the ink and leave a map-like pattern, which even by eye can be classified into four basic groups, "Arches, Loops, Whorles and Compositions." Magnify this print and the pattern of ridges begin to look like many rivers, which can be further classified by the directions they follow between the core and delta, and the number and length of these patterns. A finger print specialist learns to recognize and classify these patterns as effectively as we learn an alphabet and spelling. Many police officers have become real experts by some concentrated study, patience and thoroughness, backed of course by sincere interest.

Henry, and Holt have been good mathematicians, and have evolved a precise mathematical system for organizing these complex patterns, which takes too long to explain here. By applying IBM electronic sorting methods, which will search out and select a number combination, accurately "scanning" 20,000 cards per hour, the FBI can always find again a given print, if they have it in file.

The department of Criminal Identification is one of the most interesting studies of police work. It has de-

(Continued on Page 14)

An I.B.M. sorter makes simplified filing



# Resuscitation

## by Artificial Respiration

*(Editor's Note. This is the first in a series of staff written articles on First Aid which may be of help to police officers.)*

Before actual instruction in the new method of artificial respiration, it will be helpful to review some of the primary facts relative to the respiratory system.

Oxygen is taken from the air and as it combines with food it gives energy (life) to the body cells. Inasmuch as there is no reservoir or storage space in the body for oxygen, a constant supply must keep entering the body through the process of breathing. Brain cells are dependent upon oxygen and they die in a very short time if the supply is cut off. If the oxygen supply is curtailed slowly, the person will experience a dull headache—drowsiness—pounding in the ears—or a sensation of light-headedness or drunkenness. These are warning symptoms which very often go unheeded and are not recognized as the danger signs that they are. The next stage is an awareness of what IS happening but nothing can be done because the muscles refuse to respond. Unconsciousness follows—breathing stops, although the heart continues to beat for several minutes. This is the important period in which a life can be saved by alert resuscitation. Prompt action must be taken as one second can save a life. One can not afford to wait until a machine arrives, or until the body is removed to a more convenient place, but start NOW—on the spot—it is literally a matter of life or death.

As to the history of artificial respiration, the origin of the practice dates back to ancient times. As a matter of fact, in the Bible, the prophet Elisha restored life to the Shunammite boy (2 Kings 4:34) by placing his mouth upon the boy's and using his body in lieu of covers for warmth. Other instances of blowing through the mouth or nostrils to inflate the lungs have been recorded. The earliest type of machine was in the form of a small bellows to assist the lungs to function.

Early workers in the field of artificial respiration were Dr. Marshall Hall and Dr. Silverter. These men worked independently of each other and achieved the same results.

The forerunner of today's method was Sir E. Sharpey Schaefer (University of Edinburgh). His method is widely accepted in the world today, but is fast being replaced by a new procedure which we will discuss in a moment.

The principle of the Schaefer System is to force air, water, or any similar foreign substance from the lungs and get the muscles working. An example is a rubber ball with a large hole. Squeeze it, and the air comes out. Release your grip and the ball returns to its original shape of its own accord.

This system can be used if the muscle tone is good. But case histories have proved many times that the chest muscles have no tone due to severe shock or paralysis. After it was recognized that the Schaefer Method was good for exhalation but did not assist the inhalation, Dr. Comroe, Dr. Whittenberger and their groups worked toward the perfecting of a more effectual method.

Dr. Gordon in Chicago worked with his group, as did Dr. Karpovitch with his Naval personnel.

The result of all experimentation was two new methods of artificial respiration which are called the "Arm-Lift Back-Pressure Method" and the Hip-Lift Back-Pressure Method." Both these methods assist in inhalation and exhalation. The Hip-Lift Back-Pressure Method was devised as an alternative use when the arm is broken.

Regardless of what method you are to use, there are a few general instructions that must be quickly executed.

1: Don't wait for someone to come and help you—Don't waste time loosening clothes or trying to give a stimulant. Get started at once.

2: Put the person in a prone position (on stomach) with his face resting on his wrist. This is to prevent any inhalation of dirt or dust when breathing recommences. Open the mouth and sweep your finger through to see if the tongue is clear and remove any obstruction.

3: Begin artificial respiration. Work evenly and rhythmically until breathing is resumed or you are certain the person is dead.

4: If the patient begins to breathe, adjust your rhythm to his breathing. Do not force your rhythm on him.

5: When the patient is breathing without help, loosen his clothing, get warmth and take other measures that you had been inclined to use as your first operation.

The following are the instructions for the Arm-Lift, Back Pressure Method as prescribed by the National Safety Council.

1: Lay victim on stomach, head turned to one side, cheek on one hand. Clear mouth, throat of obstruction.

2: Kneel at victim's head.

Arm-Lift, Back Pressure Method



Back Pressure Hip Lift Method



3. Place hands, thumb tips together on the victim's back just below shoulder blade.
- 4: Rock slowly forward exerting pressure. Keep your elbows straight.
- 5: Release pressure by flexing your elbows. Rock back on your heels, sliding hands up victim's back and out along arms.
- 6: Grasp arms halfway between elbows and shoulders. Pull up towards you until you feel resistance.
- 7: Lower arms, repeat back pressure. Repeat cycle 10 or 12 times a minute.
- 8: Do not interrupt rhythm. Continue until victim is breathing or is surely dead.

The *back-pressure, hip lift* was first suggested by Holger Neilson and is the best method for use in cases of broken arm, etc. The following is a step by step instruction routine:—

- 1: Lay victim on his stomach, head turned to one side, cheek on one hand. Clear mouth, throat of obstructions.
- 2: Straddle victim's thighs. Kneel, heel at one hip, knee at other.
- 3: Place hands, thumb tips together on victims back just below shoulder blades.
- 4: Rock forward slowly to exert pressure. Keep your elbows straight.
- 5: Relax pressure by flexing elbows. Rock back on your heel.
- 6: Grasp victim under hips and lift them—five or six inches. **DO NOT GRASP VICTIM UNDER BELLY.**
- 7: Lower hips to ground. **DO NOT DROP THEM.** Repeat back pressure. Repeat cycle 10 or 12 times a minute.
- 8: Continue until victim breathes strongly or is surely dead.

Although the above methods have not been as standardized as the Schaefer method, they can be just as successfully applied by following the instructions.

## New Products and Methods



### Handie Micro-Talkie Transmitter

Motorola  
Communications and Electronics Div.  
4545 W. Augusta Blvd.  
Chicago 51, Ill.

Motorola has announced initial mass production of a hand sized Handie Micro-Talkie Transmitter designed to operate in the 152-174 megacycle frequency band. The compact unit, weighing only one pound, thirteen ounces, has a power output of 20 to 40 milliwatts and a tested optimum range up to five miles.

The complete transmitter, including self-contained dry batteries and microphone, is only 7½" by 2½" by 1¾". A rigid, chrome plated loop antenna doubles as the carrying handle.

Operation of the hand held unit is extremely simple. To transmit it is only necessary to press a button on the side of the unit. With the transmitter operated on the practical duty cycle of 15 seconds out of each five minutes, "A" battery life is one work week with the "B" batteries lasting two and a half weeks. Additional information from manufacturer available **Refer to L & O No. 4** check reader's service card.

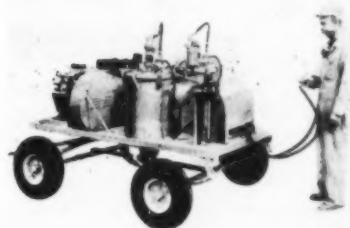
### Fingerprint Powder

Sirchie Finger Print Labs.  
922 Chestnut St.,  
Philadelphia 7, Pa.

Search "Smear-No-More" is the newest latent fingerprint powder developed by Sirchie. It sticks only to the ridges of latent prints and not polished furniture. It is guaranteed not to smear the inner space between the ridges. This powder was originated to fill the need for a fingerprint powder which will not smear on polished furniture, filing cabinets, office desks, safes or hard surfaces such as

You are invited to request further information direct, or by using the L&O post card.

tin, aluminum, bakelite, china and crockery. An unusual feature of this powder is its double purpose. "Smear-No-More" is not only excellent as a visible daylight latent powder, but it has fluorescent properties which make it a quite suitable powder for use with Black Light Lamps. Information may be obtained by writing the manufacturer or **refer to No. 6 on the L & O Service card.**



### Portable Paint Sprayer

Universal Manufacturing & Sales Co.  
5211 Pacific Blvd.  
Huntington Park, Calif.

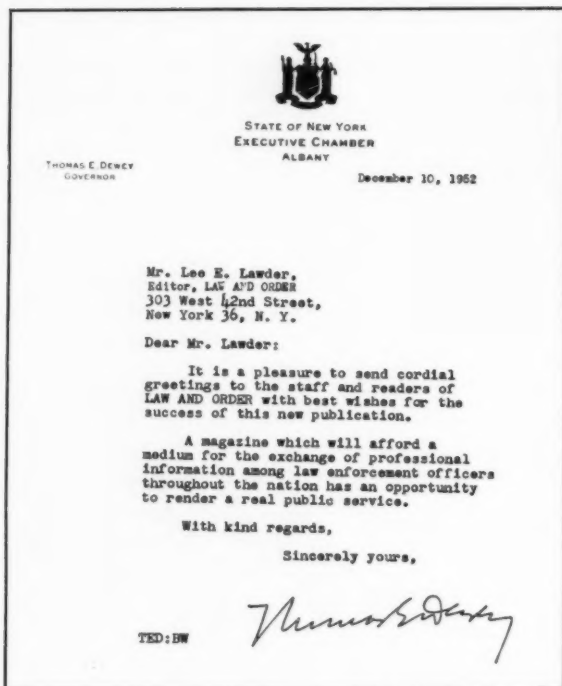
A portable spray painting outfit Model N4-432, developed for the U. S. Navy is now available.

It is entirely self-contained on a 4-wheel trailer for towing behind truck or tractor. The trailer is spring mounted and equipped with Timken Roller Bearings and pneumatic tires. Skid mounting is also available.

The 35CFM compressor can handle from one to three spray guns simultaneously. It is driven by an 8 HP air cooled motor, complete with self starter, battery and generator. Two 10 gallon paint tanks are standard equipment, but two 20- or even 30 gallon tanks can be installed without structural change. Paint may be drawn from the tanks singly or from both at once. Air and fluid are carried through 100 ft. hoses wound on a reel. In use they need not be removed but merely unreeled to the desired length.

The Universal N4-432 has many desirable features such as: automatic compressor unloader, air motor-driven paint agitators, compressed air dryer and built in hose line cleaner. For information regarding manufacturer's prices write direct or **refer to No. 7 L & O Service Card.**

# Letters



Sandpoint, Idaho, Jan. 7, 1953

I have read your copy of the Law and Order you sent to our chief and I found it very interesting . . . I feel it will help in many ways. We are a small department and any new development in Law Enforcement is of great interest to us in many ways.

George F. Elliot, Asst. Chief

## Sparta Page 9

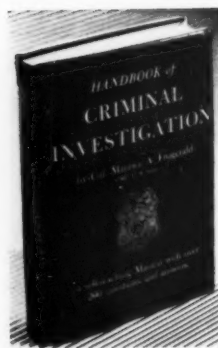
Frequently they come to me with their little problems and I am always ready to help them.

The Junior Patrol is a great thing and if I can be of any assistance to any town that would like to start one, I'll be glad to help. You see—we are a small department here—two regular policemen including myself and one part time man!

## Finger Printing Page 11

veloped into a specialized field. In many small communities it is not possible for the police department to grant time to its officers for study in this phase of criminology. These departments can still advance because of the correspondence course which is given by schools such as the Institute of Applied Science in Chicago. To meet the needs of the ever growing specialists in this field the Institute publishes a magazine which gives case histories of crimes, the art of fingerprinting serving as the means of identification.

Fingerprints are the indelible impression of a man's identity.



# Book Review

**Handbook  
of Criminal Investigation**  
by Col. Maurice A.  
Fitzgerald, CMP, U. S. Army

edited by Paul B. Weston

Greenberg Publisher, New York 1951, 2nd print. Jan. 52  
xvi, 234 p, diagrs., 21 cm (octavo) \$3.50

Col. Fitzgerald's book is for the Rookie, Auxiliary Policeman and Officer confronted with everyday problems; it is a basis for procedure. The book is a highly readable Primer on Criminal Investigation and should be of great assistance to the Police Instructor in formulating a basis for a course of lectures. The Handbook of Criminal Investigation is not intended for the Police Laboratory Specialist, however even the specialist should not ignore its pages of practical experience.

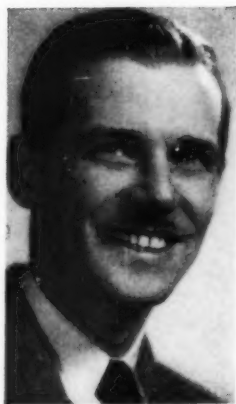
The most important man on the police force is the man on the beat and it is for him that this primer was primarily intended. The average Police Officer will be able to read and see how to apply what he has read to past, present and future cases. The absence of old theories and techniques is refreshing. The logical procedure, covering in the early part of the book the general procedures applicable to all types of criminal investigation and then covering criminal techniques, is good.

The scope of the Handbook of Criminal Investigation is illustrated by its table of contents and chapter headings: 1. The Successful Investigator, 2. Interviewing Victims and Witnesses, 3. General Procedure in an Investigation, 4. Apprehension of the Fugitive, 5. Surveillance, 6. Interrogation, Techniques, 7. Interrogation of Prisoners and Suspects, 8. Admissions and Confessions, 9. Reports and Resumé of an Investigation, 10. Modus Operandi File, 11. Professional Criminal, 12. The Habitual Sex Offender, 13. Racket Investigations, 14. Con Games, 15. The Scientific Evaluation of Evidence, 16. Terminology and Slang of Criminals.

In addition to the Chapter Headings there are Sub-headings included which are helpful in using the text and locating specific information. To test the reader each chapter is following by a series of questions, the answers to which appear in the back of the book. This feature is praiseworthy, in that often times the reader and student have little if any way to evaluate their reading.

In that the Handbook of Criminal Investigation was written only as a handbook and of necessity as such could not be overly long or all inclusive the writer Col. Maurice A. Fitzgerald and Paul B. Weston the editor have done a praiseworthy job in furnishing a text as such and still retaining general interest, readability and conversational style. The reviewer recommends the Handbook of Criminal Investigation as required reading for all branches of Law Enforcement.

David O. Moreton



## From the Editor

A first page item in a Northern New Jersey newspaper had the lead caption "Patrolman Resigns, He Can't Live On Pay". The article continued to state that on two different occasions he had received awards for heroic actions.

The resignation of good men because of insufficient remuneration is a common ailment with police departments all over the United States. In many towns patrolmen have found it necessary to find an extra job to supplement his regular police income. A practice such as this would not be allowed in a responsible commercial organization. The feeling is that a man can not "serve two masters". Yet it is necessary that this condition exists.

Many of our citizens will frankly admit the underpay situation but in one of those "don't quote me" tones ask if the policemen do not get a lot of "extras". With the "bookie" trials and crime investigation committees where the integrity of policemen are questioned the public have a tendency to paint every policeman with the same brush.

Of course we realize that in talking to you and saying "your pay should be increased" will sound very nice and will make you aware that LAW AND ORDER is on your side of the fence, but it won't make you any richer.

We believe that this is a problem that only a carefully planned public relations job can solve. It is necessary to "sell" the public on the efficient job of protection and order that police provide for them.

A glance at the figures will prove that cities and towns that have a definite program for public relations have a higher standard of pay rate than those who are not interested in the extra detail of press and public relations.

No matter how small your department is, even if it is only a two man operation, be sure to give your local newspaper a weekly report on your activities. Many will object that there are not enough events or happenings in a small town to warrant a weekly column "Our Police Department". Just remember those things which you may call "routine" are not routine to the public. Report how many cars passed along Main St. and were directed by the department, or how many doors of shopkeepers were found unlocked, or how many lost children were cared for during the week. Hundreds of little duties that you take for granted will make copy for a column. Your local editor will be glad to have your news. Build a strong foundation of good will, then when the time comes for the public to consider increasing the pay standard of your department, they will be well aware of the important services you provide the community.

Public Relations are most important to every department. We will endeavor to print a series of articles on this subject in the very near future. If any of you can offer helpful suggestions we will be happy to hear from you.

## Random Shots

The Police Department of Brookline, Mass. have distributed a printed pamphlet to the school children and their parents. It is an 8½" x 11" single sheet folded in thirds and carries a message to the children never to accept rides, money, candy or offer of a job from strangers. It impresses upon them to get the license number of the car and also gives advice such as "never play alone in alleys, better take a pal along when you go to the movies etc." The pamphlet asks the parents to constantly remind the children of the rules of safety.

In a recent recommendation to the Legislature Governor Dewey of New York was "deeply concerned" over the increase in motor vehicle accidents and set forth five suggestive corrections of conditions. One that is universally approved is the adaptation of a "uniform code of driving practices to conform with those of other states and to include hand signals, road markings and speed regulations."

Let us hope that it is only a matter of time until all states will adopt a uniform traffic code.

When we first thought of publishing this magazine we discussed it with many chiefs and department heads. A number of ideas as to what was needed was suggested, but now it is apparent there are other things that must be included. It was evident that in order to succeed we must not print articles that are "old stuff". Some said no one wanted to read "stuff" that he knew all about. At the time we thought that was a good bit of advice. Now we find that what is old stuff to one is brand new to another. The department is always enlisting new men. Some times it is weeks before these recruits have an opportunity to go to police school. In the meantime LAW AND ORDER might have just the article at the time it is most needed. We will make it a point to print *anything* that will be helpful information to any police officer.

We think the slogan that West Palm Beach is using is great. "Courtesy is Contagious."

# 5 <sup>5</sup>/<sub>6</sub> BATTALIONS-- ALL POLICE CHIEFS!

**5155** Police Chiefs maintain Law and Order in the U. S. A.  
That is the equivalent of 5 <sup>5</sup>/<sub>6</sub> battalions — every man a top  
officer — experienced — qualified!

## Advertising in LAW and ORDER

### *A Statement of Policy*

As the purpose of LAW AND ORDER is to be of service by providing information, it will welcome informative, factual advertising. It will accept the advertising of products or services which are of professional interest to the business of the police officer. As a thoroughly independent journal, advertising revenue is needed to further our scope and services to readers. Advertising itself is an asset for information about products, and is honest and "American" in that it appears over the signature of the manufacturer.

The first three issues of LAW AND ORDER will probably be published without the benefit of advertising, while we prove the interest value of the magazine, and test out our circulation and methods. These will be thin issues. As advertising is gained, our issues will be larger, and our coverage wider. Product ads will supplement and strengthen editorial information with facts on all that is new in radio, traffic methods, uniforms and equipment, cars and motor cycles, recording systems, in fact the whole paraphernalia of police work.

What will advertising cost in LAW AND ORDER? Our rates are set on a basis to allow for gains in circulation, at a base rate of \$300 a page for 10,000 copies. The immediate rates are shown below, as we are starting with over 5000 copies minimum guarantee.

2 Page Spread .....	\$250.00	1/3 Page .....	\$62.50
1 Page 7 x 10 .....	150.00	1/4 Page .....	47.50
2/3 Page .....	112.50	1/6 Page .....	37.50
Island 1/2 .....	100.00	20 Pica Col. 1" .....	7.50
1/2 Page (reg.) .....	87.50	13 Pica Col. 1" .....	5.00

Discount for 6 or more insertions per year 10%, every issue 20%.  
Advertising Agency discount 15%, Closing Date 1st of preceding  
month, issue date 25th of preceding month.

**LAW**  
AND  
**ORDER**

303 West 42nd Street  
New York 36, N. Y.

### **5155 Executives**

A Police Chief is a responsible executive, sometimes the only full-time executive, in charge of maintaining "government" in a community. He is "topman" for carrying out tangible control. To most, he is "the law".

### **5155 Employers**

As "Chief" he employs and manages his force, from a tiny but vitally important village staff to the huge army of a great city police force.

### **5155 Engineers**

The Police Chief has to know traffic and highway technicalities—possess a "sense" for city planning, and know communications systems. His job requires so many specific forms of knowledge that by practical necessity his thinking becomes good "engineering".

### **5155 Diplomats**

And to all this, he must add a touch of political genius, the ability to "judge" and to gently juggle the emotions and reasoning of his fellow townsmen and city officials—all to result in "Law and Order".

### **5155 Purchasing Agents**

These Chiefs arm, uniform, and maintain an enormous army—quartermastered from 5155 separate depots. The decisive buyer is the Chief! He is responsible for the effectiveness of his force, and it's equipment, from patrol car to CD siren, from office system to finger-printer. It is a tremendously decentralized group of men to interest and SELL.

**Reach them swiftly—  
economically—regularly**

by advertising in

**LAW**  
AND  
**ORDER**

le  
ll-  
of  
a  
or  
To

n-  
ut  
to  
ity

fic  
ess  
nd  
lis  
ms  
cal  
od

ch  
to  
he  
uis  
r",

ts  
nd  
—  
on-  
is  
he  
t's  
ED  
er-  
le-  
est

ly